

Ameren Transmission Company of Illinois

Petition for a Certificate of Public Convenience and Necessity, pursuant to Section 8-406.1 of the Illinois Public Utilities Act, to Construct, Operate and Maintain an New High Voltage Electric Service Line and Related Facilities in the Counties of Adams, Brown, Cass, Champaign, Christian, Clark, Coles, Edgar, Fulton, Macon, Montgomery, Morgan, Moultrie, Pike, Sangamon, Schuyler, Scott and Shelby, Illinois.

Docket No. 12-0598  
(on Rehearing)

## INITIAL BRIEF OF THE STAFF OF THE ILLINOIS COMMERCE COMMISSION

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**STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION**

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**I. Introduction**

This matter comes before the Commission on rehearing from its August 20, 2013 Final Order in the proceeding. On September 18, 2013 the Commission granted Andrew and Stacy Robinette's (Robinette's) Application for Rehearing, and on October 2, 2013 granted Applications for Rehearing filed by the Ameren Transmission Company of Illinois (ATXI), the Coalition of Property Owners and Interested Parties in Piatt, Douglas and Moultrie Counties (PDM) and Channon Family Trust (CFT), the Morgan, Sangamon, and Scott Counties Land Preservation Group (MSSCLPG), and the

Midcontinent Independent System Operator, Inc. (MISO). Thereafter various parties submitted testimony, an evidentiary hearing was held on December 17-19, 2013.

## II. Legal Standard

ATXI filed its petition pursuant to Section 8-406.1 of the Public Utilities Act. Section 8-406.1(f) states, in part:

The Commission shall, after notice and hearing, grant a certificate of public convenience and necessity filed in accordance with the requirements of this Section if, ***based upon the application filed with the Commission and the evidentiary record***, it finds the Project will promote the public convenience and necessity and that all of the following criteria are satisfied:

- (1) That the Project is necessary to provide adequate, reliable, and efficient service to the public utility's customers and ***is the least-cost means of satisfying the service needs of the public utility's customers*** or that the Project will promote the development of an effectively competitive electricity market that operates efficiently, is equitable to all customers, and ***is the least cost means of satisfying those objectives***. Docket No. 12-0598 (Rehearing) ICC Staff Exhibit 2.0, 15-16.

220 ILCS 5/8-406.1(f) (emphasis added).

It is further clear that ATXI bears the burden of proof in this proceeding. Where a statute does not specifically place any burden of proof, courts have uniformly imposed on administrative agencies the common-law rule that the party seeking relief has the burden of proof. Scott v. Dept. of Commerce and Community Affairs, 84 Ill. 2d 42, 53; 416 N.E.2d 1082, 1088; 1981 Ill. Lexis 229 at 14; 48 Ill. Dec. 560 (1981).

If ATXI has failed to prove by a preponderance of evidence that it is employing the least cost routing for some segments, ATXI, or ATXI and AIC jointly, must bring in a separate proceeding a request for a CPCN to construct the transmission lines necessary for completion of the MISO Multi-Value Project #10 and #11. Staff Ex. 2.0, 16; see also, 5 ILCS 100/10-15; Order at 4, Illinois Commerce Commission on its Own

Motion: Amendment of 83 Ill. Admin. Code Part 200, ICC Docket No. 92-0024 (April 29, 1992) (standard of proof in Commission proceedings is preponderance of evidence).

### **III. Project Connection Through Kincaid Versus Pana**

Using a Pawnee to Kincaid to Mt. Zion route, instead of the Pawnee to Pana to Mt. Zion route that ATXI proposes, would result in the lowest overall costs. Staff Ex. 4.0, 2. ATXI identifies five potential problems/costs that could occur if ATXI were to implement a Pawnee to Kincaid to Mt. Zion connection. Staff Ex. 3.0, 5.

First, ATXI is concerned that existing substation facilities at Kincaid might need to be modified. Staff Ex. 3.0, 5. While it is true that substation facilities at Kincaid may need to be modified, modifications at Kincaid could lead to the elimination of existing operating concerns at Kincaid while simultaneously achieving the benefits associated with MISO's Multi-Value Projects at lower cost. Id. at 5-6.

Second, ATXI expresses concern that AIC's customers will have to bear the entire cost of a relocation of AIC's transmission equipment at Pana due to mine subsidence. Staff Ex. 3.0, 6. ATXI, however, clearly states that subsidence is not occurring at the Pana substation (ATXI Ex. 9.0(RH), 4), which has existed at its present location since 1972. Staff Cross Ex. 1.0 (ATXI response to Staff DR ENG 2.14(b)). AIC cannot claim that it needs to relocate its transmission facilities at this time simply because costs for doing so at this time would be shared throughout MISO. Staff Ex. 3.0, 7. While it would not be prudent to place additional transmission facilities at Pana, there is no evidence that the relocation work at Pana is necessary. Id. Another consideration is that MISO Multi-Value Projects exist in North Dakota, South Dakota, Minnesota, Iowa, Wisconsin, Missouri, Indiana, and Michigan. Staff Ex. 1.0, Attachment J. Costs of

MISO Multi-Value projects in these other states will be allocated to Illinois ratepayers, just as costs for the four MISO Multi-Value projects that comprise ATXI's Illinois Rivers Project will be allocated to ratepayers in other states. Accordingly, it is appropriate to consider whether it would be fair for utilities in other states to perform unnecessary work simply because ratepayers in Illinois will help pay the cost.

Third, ATXI expresses concern that, because it had not fully considered a Pawnee to Kincaid to Mt. Zion connection prior to filing its petition, such a connection would require additional time to study and coordinate with ComEd and PJM, and likely not address Decatur area reliability until 2018. ATXI Ex. 1.0(RH), 6, 15-16. While the record does not reflect whether a Pawnee to Kincaid to Mt. Zion connection could be completed more quickly if necessary studies were given priority, to alleviate this concern ATXI could construct the approved Mt. Zion to Kansas segment sooner than 2018, as is presently indicated on ATXI Ex. 2.4. Staff Ex. 3.0, 7-8. In addition, Staff proposes a substation site near Moweaqua that would support voltage in the Decatur area by providing a connection to an existing AIC 138 kV line that already supplies the Decatur area. Id. Using only one 345 kV connection to Kansas to the substation site near Moweaqua that Staff identified and AIC's existing 138 kV transmission line north to the Decatur area, post contingency voltages, assuming 2021 peak summer loading, would remain above 90%: above the voltage level for which there is a significant risk of voltage collapse and loss of load. ATXI Ex. 4.0(RH), 7; Staff Cross Ex. 2.0 (Attachment 7 to ATXI's response to Staff DR 13.08).

Fourth, ATXI expresses concern that, due to the existing bus configuration at Kincaid Substation, the Pawnee to Kincaid to Mt. Zion connection might result in an



overload of the 345/138 kV transformer planned for the Decatur area if an unplanned opening of two breakers at the Kincaid ring bus occurs. Staff Ex. 3.0, 8-9. Previously contemplated modifications to the existing 345 kV configuration at Kincaid Substation, however, could alleviate this concern.

Fifth, and finally, ATXI expresses concern that the Pawnee to Kincaid to Mt. Zion connection would not improve stability of Coffeen power plant to the same extent as ATXI's proposed connection through Pana. Staff Ex. 3.0, 9. If, however, ATXI uses the substation site near Moweaqua that Staff identifies, AIC's existing 138 kV transmission line would connect the existing Pana Substation to ATXI's proposed 345 kV transmission line, which could improve stability at Coffeen. Staff Ex. 3.0, 9.

ATXI should fully study the costs associated with a Pawnee to Kincaid to Mt. Zion connection, and compare costs and benefits associated with the Pawnee to Kincaid to Mt. Zion connection with the costs and benefits for using the Pawnee to Pana to Mt. Zion connection it proposes. Staff Ex. 3.0, 10. On its face, ATXI Ex. 1.6(RH) indicates that the overall cost of the Pawnee to Kincaid to Mt. Zion connection would be approximately \$45.4 million lower than a Pawnee to Pana to Mt. Zion connection (\$202.9 million - \$157.5 million), and would result in a transmission line that is approximately 25 miles shorter. This \$45.4 million assumes that a \$32.9 million relocation of AIC's existing Pana Substation occurs, which Staff disputes is necessary. Id. at 10-11. Therefore, ATXI's own projection indicates that using the Pawnee to Kincaid to Mt. Zion connection could result in a savings of \$88.3 million: a significant savings that could be used to offset costs for addressing the existing operational issues at the Kincaid substation for which ATXI expresses concern. Id. at 11. Since Kincaid

modifications/upgrades would improve transmission system operations for two RTOs, Staff does not know how costs for those modifications would be allocated. Id.

#### **IV. Rehearing Routes**

##### **A. Meredosia-Pawnee**

The route originally presented by Morgan and Sangamon County Landowners and Tenant Farmers (“MSCLTF”) and supported by MSSCLPG (“MSSCLPG Route”) for the Meredosia-Pawnee segment of the Illinois Rivers Project remains superior to others proposed. The table presented by ATXI witness Donell Murphy on page 7 of ATXI Ex. 3.0(RH) demonstrates that the MSSCLPG Route is equal to or superior to the ATXI Alternate Route for nearly all criteria listed, and that even criteria that are identified as equal in the table would actually favor the MSSCLPG Route because there would be 21 fewer miles of transmission line causing those impacts. Staff Ex. 3.0, 2.

##### **1. Length of line**

The first entry in Table 1 on page 7 of ATXI Ex. 3.0(RH) demonstrates that the MSSCLPG Route is 21 miles shorter than the ATXI Recommended Route.

##### **2. Difficulty and Cost of Construction**

The second entry in Table 1 on page 7 of ATXI Ex. 3.0(RH) shows that neither route has unique considerations but that since the MSSCLPG Route is 21 miles shorter than the ATXI Recommended Route the construction cost of that route would be lower.

##### **3. Difficulty and Cost of Operation and Maintenance**

The third entry in Table 1 on page 7 of Ex. 3.0(RH) purports to show that there are reliability concerns associated with the MSSCLPG Route because it parallels an existing AIC 138 kV transmission line for most of its length. The Commission should ignore this. The MSSCLPG Route and ATXI’s Alternate Route would equally comply

with North American Electric Reliability Corporation (“NERC”) Reliability Rules. Staff Ex. 3.0, 3; ATXI Ex. 9.0(RH), 8. ATXI’s Alternate route, however, has 21 miles of additional line to operate and maintain, a fact that ATXI appears to ignore. Id. at 2.

4. Environmental Impacts

The fourth entry in Table 1 on page 7 of ATXI Ex. 3.0(RH) demonstrates that ATXI’s Alternate Route would result in incrementally more ground disturbance due to its greater length.

5. Impacts on Historical Resources

The fifth entry in Table 1, on page 7 of ATXI Ex. 3.0(RH), states that ATXI’s Alternate Route would span two more archaeological sites than would the MSSCLPG Route.

6. Social and Land Use Impacts

The entry for this criterion in Table 1 on page 8 of ATXI Ex. 3.0(RH), states that the land use along both routes is generally the same. Even criteria that are identified as equal in the table would actually favor the MSSCLPG Route because there would be 21 fewer miles of transmission line causing those impacts. Staff Ex. 3.0, 2.

7. Number of Affected Landowners and other Stakeholders

Eighty-seven fewer landowners would be affected by the MSSCLPG Route. ATXI Ex. 3.0(RH), 8, Table 1.

8. Proximity to Homes and Other Structures

There are twenty fewer residences within 500 feet along the MSSCLPG Route compared to ATXI’s alternate route. ATXI Ex. 3.0(RH), 8, Table 1.

9. Proximity to Existing and Planned Development

There does not appear to be planned development along either route.

10. Community Acceptance

ATXI entered into stipulations with MSCCLTF and FutureGen regarding acceptance of ATXI's Alternate Route. ATXI Ex. 3.0(RH), 8. MSCCLTF, FutureGen, the Pearce family ("Pearce") and Staff would all accept the MSSCLPG Route. More parties in this proceeding would accept the MSSCLPG Route than would accept the longer, more costly ATXI Alternate Route. Staff Ex. 3.0, 4; ATXI Ex. 9.0(RH), 8.

11. Visual Impact

The land use along both routes is generally the same: agricultural/rural. ATXI Ex. 3.0(RH), 8, Table 1. Even criteria that are identified as equal in the table, such as visual impacts, would actually favor the MSSCLPG Route because there would be 21 fewer miles of transmission line causing those impacts. Staff Ex. 3.0, 2.

12. Presence of Existing Corridors

As it heads east from Meredosia, the MSSCLPG Route and ATXI's Alternate Route parallel the same AIC 138 kV transmission line. As indicated by the last entry in Table 1 on page 8 of ATXI Ex. 3.0(RH), ATXI's Alternate Route follows this existing corridor for a portion of its length, the MSSCLPG Route follows this existing corridor for almost its entire length.

**B. Location of Mt. Zion Substation**

ATXI recommends locating the substation on Sulphur Spring Road, south and west of the Village of Mt. Zion because it offers a higher level of voltage support for the specific set of system contingencies and conditions that were analyzed. ATXI Ex. 4.0(RH), 9. Staff identifies three other possible locations for the substation: two about 3 miles south and east from the location that ATXI recommends, along ATXI's Primary

Route between Mt. Zion and Kansas, and one south and west of this location, along ATXI's Primary Route between Pana and Mt. Zion. Staff Ex. 5.0, Exhibit A, 15; Staff Ex. 2.0, Attachment A.

Though any of the substation sites that Staff identifies would serve as good substation sites, there are several advantages associated with the substation site Staff has identified in Macon County, north of W. Hilvety Rd. (CR 2100N) and east of Rosedale Rd.: (1) AIC has an existing 138 kV line extending north from this location to the Decatur area, so that AIC would not need to without delay petition the Commission for a CPCN to construct 138 kV transmission lines from the Mt. Zion substation site to the Decatur area; (2) AIC could extend a 138 kV line from its existing substation north of Moweaqua, near Hwy 51, to provide additional support to the Decatur area, if needed; (3) AIC's existing 138 kV transmission line that runs south from this substation site extends to AIC's existing 345/138 kV substation in Pana, so that the same 345/138 kV substation that provides support for the Decatur area would also provide support for the Pana area; and (4) AIC's 138 kV transmission line that extends south to Pana from the substation site near Moweaqua that Staff identified could, at some future date, be converted to a 345 kV line, minimizing impacts to all property owners along ATXI's Primary Route previously submitted for the Pana to Mt. Zion segment. Staff Ex. 2, 9-11.

ATXI conducted several power flow analyses that allegedly illustrate that the substation site near Moweaqua that Staff identifies will not provide adequate voltage support for the Decatur area during the 2016 to 2018 time frame. ATXI Ex. 4.0(RH), 7-9. ATXI considers post contingency voltages of 95% or higher to be adequate, and ATXI's level of concern for possible voltage collapse and loss of load increases as the

percentage of nominal voltage decreases from 95%. At between 89% and 85% of nominal, there is a significant risk of voltage collapse and loss of load. At 85% of nominal, a voltage collapse is essentially assured. ATXI Ex. 4.0(RH), 7. Per ATXI, a post contingency voltage of 90.9% would exist at the 138 kV bus at Oreana substation following loss of both 345/138 kV Oreana transformers utilizing only the existing 138 kV line to the Decatur area: no additional 138 kV transmission lines immediately installed. ATXI Ex. 4.3(RH). This is above the voltage level at which ATXI believes a significant risk of voltage collapse and loss of load would exist. Even so, the conditions represented by the power flow analyses results in ATXI Ex. 4.1(RH) to ATXI Ex. 4.4(RH) are not the conditions that would actually exist were Staff's recommendation implemented. Specifically, the power flow studies associated with ATXI Ex. 4.1(RH) to ATXI Ex. 4.4(RH) assume a single 345 kV connection from Pana, with 345 kV connections from Kincaid to Mt. Zion and from Kansas to Mt. Zion out-of-service. Staff Ex. 4.0, 6. In addition ATXI's power flow studies use peak loads in the Decatur area that are expected to exist in 2021, not in 2016 to 2018. ATXI Ex. 2.0, 28-29; Tr. 112-113. When ATXI re-ran its power flow analyses to reflect the 345 kV sources from Kincaid and Kansas, as included in Staff's recommendation, the results of ATXI's power flow study show post contingency voltages under the same loading assumptions would be at 91.38% - again assuming 2021 summer peak loading with only the existing 138 kV connection to the Decatur area. Staff Cross Ex. 2.0 (Attachment 8 to ATXI's response to Staff DR 13.08). According to ATXI, a second 138 kV connection from the substation site near Moweaqua to the Decatur area, as Staff suggests, would result in a post contingency voltage at the Oreana 138 kV bus using 2021 loads of 93.52%. Staff

Cross Ex. 2.0 (Attachment 6 to ATXI's response to Staff DR 13.08). While Staff does not believe a post contingency voltage of 93.52% would pose significant concern for voltage collapse, ATXI/AIC could use lower impedance 138 kV conductor or install an additional 138 kV transmission line to the Decatur area to provide even greater voltage support. Tr. 120-121; Staff Cross Ex. 3.0. ATXI's power flow study results show that post contingency voltages in the Decatur area following loss of both 345/138 kV transformers at Oreana during 2021 summer peak loading conditions would be above 95% for the other two substation locations that Staff identifies. Staff Cross Ex. 2.0 (Attachment 4 to ATXI's response to Staff DR 13.08).

Though post contingency voltages in the Decatur area would be lower than post contingency voltages from the other proposed substation sites, use of the substation site identified near Moweaqua remains the best course. This is because the lower post contingency voltages still do not cause significant concern for voltage collapse or loss of load, and the site offers several significant advantages, as previously described, that the other substation sites do not offer.

### **C. Pawnee-Mt. Zion**

#### **1. Pawnee – Mt. Zion via Kincaid**

It does not appear that, prior to filing its petition, ATXI adequately considered a route option from Pawnee to Mt. Zion via Kincaid. Staff Ex. 3.0, 10. As previously discussed, ATXI objects to using a route from Pawnee to Mt. Zion via Kincaid because it did not fully study the route, and because it is concerned that doing so now would delay part of its project. ATXI Ex. 1.0(RH), 15-16. ATXI's objection, however, does not change the fact that, given all available information in this docket, a route segment

between Pawnee and Mt. Zion via Kincaid, rather than Pana, would result in lower costs.

a. Length of Line

The alternative route that Staff identified between Pawnee and Mt. Zion via Kincaid would reduce the length of new 345 kV line by approximately 25 miles when compared to ATXI's proposed route through Pana.

b. Difficulty and Cost of Construction

The route that Staff identified would use 5.2 miles of AIC's existing 345 kV transmission lines between Pawnee to the Kincaid area, so that no construction between those points would be required and impacts to landowners would be avoided. Staff Ex. 2.0, 8. New transmission lines would be required for the remaining distance to Mt. Zion, following section lines, field boundaries, and roads. Staff Ex. 5.0, Att. A. The difficulty of constructing Staff's proposed route via Kincaid and ATXI's proposed routes via Pana would be comparable, but ATXI's route via Pana would require about 25 miles more new transmission line, and would thus be more costly to construct. ATXI's proposed route via Pana would require ATXI to construct an entire new substation, whereas Staff's identified route via Kincaid, may require ATXI to coordinate modifications to the existing Kincaid Substation with PJM/ComEd. Staff Ex. 3.0, 10. ATXI's estimated cost for constructing a 345 kV line along the route Staff identified between Pawnee and Mt. Zion via Kincaid, exclusive of substation costs, is \$90.3 million. ATXI Ex. 1.6(RH). ATXI's estimated cost for constructing a 345 kV line along the route it identified between Pawnee and Mt. Zion using ATXI's Alternate 2 Route



from Pawnee to Pana and ATXI's Primary Route from Pana to Mt. Zion is 127.9 million (\$65.0 million + \$62.9 million), exclusive of substation costs. ATXI Ex. 7.4(Rev.).

c. Difficulty and Cost of Operation and Maintenance

Given that the alternative route via Kincaid that Staff identified is shorter, the cost of operation and maintenance, including vegetation clearing, would be less on that route. In addition, the alternative route identified through Kincaid could result in an elimination of the operating issues about which ATXI expresses concern. ATXI Ex. 2.0(RH), 29; Staff Ex. 3.0, 5-6 and 11.

d. Environmental Impacts

There do not appear to be any significant environmental impacts along either the alternative route via Kincaid that it identified or along ATXI's route through Pana. On December 11, 2013, Macon County Conservation District filed a document titled: "Direct Testimony of Kathleen Merner on Andrew Robinette Rehearing and Response to Staff Recommendation on Alternative Route" (MCCD Ex. A), along with several attached exhibits. These documents were placed into evidence during the evidentiary hearing on December 19, 2013. Tr. 395-398. MCCD claims to own two parcels located just north of the route that Staff identified between Pawnee and Mt. Zion, east of Hwy 51, in Macon County. MCCD Ex. 1 and 2; see *also* Staff Ex 5.0, 12 (illustrating MCCD's two parcels). The parcel owned by MCCD to the west corresponds to line number 93 in Attachment C to Staff Ex. 5.0, and the parcel to the east corresponds to line number 66 in Attachment C to Staff Ex. 5.0. MCCD Ex. 7.0 and MCCD Ex. 8.0 indicate that on December 10, 2012, Jean and Arie Van Leeuwen divided their property, listed on line 93 of Attachment C to Staff Ex. 5.0, and transferred ownership of the lower 65.05 acres

to MCCD, retaining the northern 17.8 acres. MCCD Ex. 9.0 indicates that on December 5, 2013, the Natural Heritage and Wildlife Foundation of Decatur transferred ownership of its property, listed on line 66 of Attachment C to Staff Ex. 5.0, to MCCD. Staff's alternative route runs along the southern property line of these parcels. Attachment A to Staff Ex. 5.0, 12. MCCD testifies that its property cannot be taken through condemnation. MCCD Ex. A, 8. Use of Staff's alternative route would not require ATXI to take or traverse MCCD property because the 150-foot easement width could occupy a 150-foot strip on the north edge of the property located to the south of MCCD's recently acquired property. This property to the south is identified on line 8 of Attachment C to Staff Ex. 5.0.<sup>1</sup>

e. Impacts on Historical Resources

There do not appear to be any impacts to historical resources along either the route that Staff identified or the route that ATXI proposes.

f. Social and Land Use Impacts

The land use along the route that Staff identified or the route that ATXI proposes is agricultural. The route that Staff identified is shorter, meaning there would be incrementally fewer impacts.

g. Number of Affected Landowners and Other Stakeholders

With Exhibits B and C to Staff Ex. 5.0, Staff identified 150 properties in Christian County and 110 properties in Macon County whose owners could be affected by ATXI's transmission line if Staff's alternative route were used. The actual number in landowners in each county would be fewer, since Staff included all properties that were

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<sup>1</sup> Macon County parcel identification numbers are publicly available at: <http://gis.co.macon.il.us/>

close to its alternative route proposal. Given that Staff's alternative route would require 25 miles less transmission line, it is likely that fewer landowners would be affected.

h. Proximity to Homes and Other Structures

Staff's route minimizes the number of homes and structures that would be close to ATXI's transmission line. There are several locations along ATXI's Pawnee to Pana to Mt. Zion route that would cause ATXI's transmission line to be in close proximity to homes and other structures, including those identified by interveners Sprague and Raynolds/Ramey.

i. Proximity to Existing and Planned Development

There does not appear to be any planned development along either the route that Staff identified or the route that ATXI proposes.

j. Community Acceptance

MCCD is the only party who express concern regarding the alternative route that Staff identified. In addition to Staff, interveners Sprague and Raynolds/Ramey express concern regarding ATXI's proposed route.

k. Visual Impact

The visual impacts along the route that Staff identified and the route that ATXI proposes is similar, as land use is mostly agricultural. The route that Staff identified is 25 miles shorter, meaning there would be incrementally fewer visual impacts.

l. Presence of Existing Corridors

The route that Staff identified parallels section lines, half-section lines, quarter-section lines, and field lines, as well as roadways. ATXI's proposed route parallels an

existing 138 kV line between Pana and Mt. Zion. The route that Staff identified requires 25 miles less transmission line.

## **2. Pawnee-Mt. Zion Via Pana**

### **a. Pawnee-Pana (including Ramey/Raynolds Option)**

Raynolds/Ramey primarily supports a direct route from Pawnee to Mt. Zion, Raynolds/Ramey also proposes a modification to ATXI's Alternate Route 2 should the Commission determine that ATXI is to construct its proposed 345 kV transmission line between Pawnee and Pana. Staff Ex. 4.0, 10. As shown on Raynolds/Ramey Ex. 1.1, the Raynolds/Ramey alternative route would modify ATXI's Alternative Route 2 by angling south from CR 1025N, east of Hwy 48, and paralleling an existing AIC 345 kV and 138 kV transmission line until rejoining ATXI's Alternate Route 2 east of CR 1250E. Id. Raynolds/Ramey compares ATXI's Alternate Route 2 with the modification to ATXI's Alternate Route 2 without the modification using the criteria that the Commission identified in its August 20, 2013, Final Order, and concludes that ATXI's Alternate Route 2 with the route modification is superior. Id. If the Commission determines ATXI should construct its project on this segment, the modification to ATXI's Alternate Route 2 that Raynolds/Ramey proposes should be adopted. Id.

#### **i. Length of Line**

The Raynolds/Ramey route is somewhat shorter than ATXI's proposal. Staff Ex. 4.0, 10.

#### **ii. Difficulty and Cost of Construction**

Because it is shorter, the Raynolds/Ramey route would cost somewhat less to construct than ATXI's proposal. Id.

iii. Difficulty and Cost of Operation and Maintenance

Because it is shorter, the Raynolds/Ramey route would cost somewhat less to maintain and operate than ATXI's proposal. Id.

iv. Environmental Impacts

v. Impacts on Historical Resources

vi. Social and Land Use Impacts

vii. Number of Affected Landowners and other Stakeholders

viii. Proximity to Homes and Other Structures

Raynolds/Ramey object to the proximity of ATXI's Alternate 2 route to five residences, including their residence. Raynolds/Ramey claim that there are no affected residences within 1000 feet of their proposed modification. Raynolds/Ramey Ex. 1.0, 12-13.

ix. Proximity to Existing and Planned Development

x. Community Acceptance

xi. Visual Impact

xii. Presence of Existing Corridors

Raynolds/Ramey's modification to ATXI's Alternate 2 route parallels existing AIC transmission lines. Raynolds/Ramey Ex. 1.1.

**b. Pana-Mt. Zion**

ATXI proposes a route between Pana and Mt. Zion that would follow ATXI's Primary Route north from Pana until meeting Staff's alternative route, then follow Staff's alternative route to Staff's proposed Option 1 or Option 2 substation site. If the

Commission does not adopt a route from Pawnee to Mt. Zion via Kincaid, then ATXI's route should be adopted. Staff Ex. 4.0, 11.

i. Length of Line

ATXI has placed a jog in its Primary Route which results in a longer route. Staff Ex. 4.0, 12.

ii. Difficulty and Cost of Construction

The slightly longer route noted above would increase the cost of construction somewhat. Id.

iii. Difficulty and Cost of Operation and Maintenance

The slightly longer route noted above would increase the cost of operation and maintenance somewhat. Id.

iv. Environmental Impacts

v. Impacts on Historical Resources

vi. Social and Land Use Impacts

vii. Number of Affected Landowners and Other Stakeholders

viii. Proximity to Homes and Other Structures

The jog in question appears to impact several additional residences. Staff Ex. 4.0, 12. Eric Sprague proposes three alternative routes, the simplest of which would continue to parallel AIC's existing 138 kV line, rather than jog to the west. Id. It does not appear that adequate space exists for ATXI to parallel AIC's existing 138 kV line north of CR 1900N unless ATXI displaces a residence or ATXI and AIC share the easement and two structures. Id.

It is not clear whether notification of affected landowners occurred, or whether omission of notifications to affected landowner would preclude ATXI from using any of Mr. Sprague's alternative route suggestions. If it would not and if the Commission approves a Pawnee to Pana to Mt. Zion segment – which it should not do - ATXI's alternative route proposal in combination with Mr. Sprague's alternative 3, shown on Sprague Ex. 1.4, would be the superior route, as illustrated by the table that Mr. Sprague identifies as Sprague Ex. 1.5.

ix. Proximity to Existing and Planned Development

x. Community Acceptance

xi. Visual Impact

xii. Presence of Existing Corridors

#### **D. Mt. Zion-Kansas**

There appear to be three alternate routes proposed for this segment, two of which use combinations of ATXI's Primary and Alternate Routes. Staff EX. 4.0, 12. ATXI and MCPO recommend the MCPO MZK route to which they stipulated, with a potential adjustment on the west end of the route to accommodate Staff's alternate route from Pawnee to Kincaid to Mt. Zion, if required. Id. PDM with CFT jointly recommend a combination of ATXI's Primary and Alternate routes. Id. If Staff's alternative route from Pawnee to Kincaid to Mt. Zion is used, the lowest construction cost route for the Mt. Zion to Kansas segment would likely be realized by using a combination of ATXI's Primary and Alternate routes, though Staff does not propose exactly the same combination as PDM/CFT. Id.

1. Length of Line

The PDM/CFT Route and Staff route proposals would be approximately the same length and shorter than the ATXI/MCPO Route. Staff Ex. 4.0, 12. ATXI's proposed substation site and route would result in a distance of 69.2 miles. ATXI Ex. 5.1 (RH), 2. Adding a distance of about 1.5 miles to adjust for use of Staff Mt. Zion Substation site Option #1 (the Option #1 site is 3 miles south minus 1.5 miles east of ATXI's proposed substation site), the length of the MCPO/ATXI route would be 70.7 miles. Staff Ex. 4.0, 12. ATXI Ex. 5.1(RH) also indicates that the PDM/CFT Hybrid Route from ATXI's proposed Mt. Zion substation site is 66.15 miles. Id. at 13-14. Subtracting about 4.5 miles to adjust for use of Staff Mt. Zion Substation site Option #1 (the Option #1 site is 3 miles south plus 1.5 miles east of ATXI's proposed substation site) would result in a PDM/CFT or Staff route length of about 61.65 miles. Id. at 14. Thus, based upon ATXI Ex. 5.1(RH), the ATXI/MCPO route would be approximately 9 miles longer than the PDM/CFT Route if Staff's Mt. Zion Substation site Option #1 is used, and about 3 miles longer if ATXI's proposed Mt. Zion substation site is used. Id. Again, Staff's proposal is roughly the same length as the PDM/CFT Route. Id. Since Staff's alternative route would be the same if Staff substation Option #3 is used, use of Staff substation site Option #3 would result in the same route lengths for the Mt. Zion to Kansas segment as use of Staff substation site Option #1. Id.

If the Commission elects to select a route between Mt. Zion and Kansas, evidence in this proceeding argues in favor of the ATXI/MCPO Route. Staff Ex. 4.0, 17. Though more costly to construct, this route is the best choice of the three routes discussed above. Id. There are negative aspects associated with each of the three route options. Id. The ATXI/MCPO Route is longer than the others because, after



leaving the Mt. Zion area, it extends several miles to the north prior to turning east and south to reach Kansas. Id. at 17-18. The PDM/CFT and Staff hybrid route proposals use combinations of ATXI's Primary and Alternate Routes that are in close proximity to more residences than is the ATXI/MCPO Route. Id. at 18. Given time for greater research, parties might develop better transmission line routes between Mt. Zion and Kansas than those presented in this docket. Id. Given the three routes under consideration, the Commission must choose between more expensive initial construction and additional line length versus more numerous impacts to landowners in the form of proximity to structures, including residences. Id. In this case, the latter consideration should prevail.

2. Difficulty and Cost of Construction

Baseline costs for the ATXI/MCPO Route of about \$1,915,188 per mile, which equates to \$135,403,791 for 70.7 miles. ATXI Ex. 5.1(RH). Costs for the PDM/CFT Route of about \$1,927,962 per mile, which equates to \$118,473,265 for 61.65 miles. Id. Based upon this approximation, the PDM/CFT Route baseline cost would be about \$16.9 million less than the ATXI/MCPO Route using Staff's Mt. Zion Substation site Option #1 or Option #3, and about \$5 million less using ATXI's proposed substation site. Staff Ex. 4.0, 14-15. The cost of Staff's proposed route would be only slightly lower than the PDM/CFT Route cost because it would require two fewer dead-end structures. Id. at 15.

3. Difficulty and Cost of Operation and Maintenance

4. Environmental Impacts

5. Impacts on Historical Resources

6. Social and Land Use Impacts

7. Number of Affected Landowners and Other Stakeholders

8. Proximity to Homes and Other Structures

The hybrid routes that PDM/CFT and Staff propose would cause the transmission line to be closer to more residences and structures. Specifically, the ATXI/MCPO Route are in close proximity to only three residences regardless of whether ATXI's proposed Mt. Zion substation site or Staff's alternative route from Pawnee to Kincaid to Mt. Zion is selected:

- A residence across Sulphur Spring Rd. from ATXI's proposed substation site – if ATXI's proposed Mt. Zion substation site is used.
- A residence on Henry Rd. south of Wheeler Rd. in Moultrie County - if Staff's Mt. Zion Substation site Option #1 is used in combination with the ATXI/MCPO route.
- A residence on the south side of County Hwy 60 east of the Hwy 60 intersection with Hienz Rd, in Moultrie County
- A residence on the west side of CR 2700E north of CR 1720N, in Coles County.

Staff Ex. 4.0, 15.

The PDM/CFT Hybrid Route and the hybrid alternative that Staff proposed are in close proximity to 15 residences. Residences were common to both routes, except as noted:

- Two residences on CR 1900N between CR 400E and CR 500E, in Moultrie County.

- A residence on CR 800E south of CR 1850N, in Moultrie County.
- Two residences on Cushman Rd., one north and one south of CR 1750N, in Moultrie County - if the PDM/CFT Hybrid Route is used.
- A residence on Murphy Rd. east of Eagle Pond Rd., in Moultrie County - if Staff's proposed hybrid route is used.
- A residence on Cooks Mill Rd west of CR 1625E, in Moultrie County- if Staff's proposed hybrid route is used.
- Two residences along County Hwy 2 east of CR 1625E, in Moultrie County
- Two residences on CR 1500N west of CR 250E, in Coles County.
- A residence on CR 1500N at the Kaskaskia River crossing, in Coles County.
- A residence on CR 700E south of CR 1480N, in Coles County.
- A residence on CR 800E north of CR 1480N, in Coles County.
- Two residences near the intersection of CR1470N and CR 2300E, in Coles County.
- A residence east of CR 2350E and south of CR 1470N, in Coles County.

Staff Ex. 4.0, 16.

#### 9. Proximity to Existing and Planned Development

In addition to the residences described above, the PDM/CFT Route, following ATXI's Primary Route, passes through a development area along Hwy 121, east of the community of Sullivan. ATXI Ex. 4.2, Part 70, 1. The existence of this development area is the primary reason to adopt a different route combination proposed by Staff on

rehearing that uses ATXI's segment option shown on ATXI Ex. 4.2, Part 69, page 2, to connect ATXI's Primary Route to ATXI's Alternate. Staff Ex. 4.0 17. Use of ATXI's proposed substation site would cause the ATXI/MCPO Route to pass through a planned development area identified by the Village of Mt. Zion. Id. This Mt. Zion development area would be avoided if any of Staff's suggested substation sites is used. Id.

10. Community Acceptance

11. Visual Impact

12. Presence of Existing Corridors

The ATXI/MCPO Route parallels existing AIC transmission lines for several miles north of Kansas. Staff Ex. 4.0 17.

**V. Certificate for Other Substations**

**A. Resolved**

1. Kansas Substation Site
2. Sidney Substation Site
3. Rising Substation Site

**B. Contested**

1. Ipava Substation Site

ATXI does not need to construct a new substation east of AIC's existing substation just because its costs for doing so would be shared across MISO. ATXI could install a four-position ring bus at AIC's existing substation and still have a spare position for a future 345 kV connection. Staff Ex. 3.0, 12-13.

2. Pana Substation Site

As previously explained, a route between Pawnee and Mt. Zion via Kincaid should be adopted, so that no new substation at Pana will be required as part of this project. ATXI has determined that subsidence is not occurring at AIC's existing Pana Substation, and Staff does not understand that relocation is justified at this time. ATXI Ex. 9.0(RH), 4. If, however, the Commission determines that ATXI should construct its transmission line from Pawnee to Pana to Mt. Zion - though it should not - the substation site or design that ATXI proposes is unobjectionable.

## **VI. CONCLUSION**

The Staff recommends that the Commission grant ATXI a CPCN consistent with the limitations and qualifications expressed by the Staff in this Initial Brief.

WHEREFORE Staff of the Illinois Commerce Commission respectfully requests that its recommendations be adopted in their entirety consistent with the arguments set forth herein.

Respectfully submitted,

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